Home Plug AV mini Ethernet Bridge

Model: 123456789001

User Manual

Safety

FCC

This equipment has been tested and found to comply with Part 15 Class B of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference
(2) This device must accept any interference received, including interference that may cause undesired operation.

CE

This equipment is in compliance with the requirements of the following regulations: CE Mark, 89/336/EEC

RoHS

This product is RoHS compliant.

Table of Contents

1 Home Plug Powerline....2

1.1 Introduction....2
1.2 System Diagram....2
1.3 Casing Details....3
Front Casing....3
Status Lights....3
Bottom Casing....4
Buttons....4
1.4 Initial Setup....4
Connect the Home Plug AV Ethernet Bridge to a Computer o
Modem /Router....5

2 Individual Home Plug AV Network Setup (Optional) 5

2.1 Creating a new individual Home Plug AV network
(Network AB) 6
2.2 Adding Bridge C to existing Network AB (Network ABC)
2.3 Removing Bridge B from Bridge A & C Network and join with
Bridge D & E (Network BDE) 7

3 Troubleshooting....8

1 HomePlug Powerline

HomePlug Powerline is an excellent solution that can be used to extend your network. In the home or small office building, use HomePlug Ethernet Bridges to link multiple locations without the need to run long Ethernet cables. Combined with a broadband DSL/Cable connection, every room with electrical outlets will have easy access to high-speed internet connection. With the HomePlug AV speed of up to 200Mbps, this easy-to-setup solution can provide fast streaming HD movies, online multiplayer games, and other data intensive activities for today' s HD Entertainment Center demand.

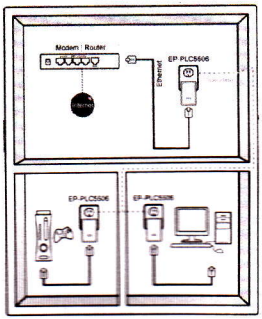
1.1 Introduction

Each HomePlug AV Ethernet Bridge allows you to connect one device that has an Ethernet port to a Powerline network. In operation, the HomePlug AV Ethernet Bridge is completely transparent, and simply passes data between the Ethernet port and the Powerline network. Any Ethernet-enabled device may be connected to the HomePlug AV Ethernet Bridge' s Ethernet port.

1.2 System Diagram

Add high-speed internet access to any room in your home with this HomePlug AV Ethernet Bridge. You can stream HD movies and music, play online multi-player games and much more.

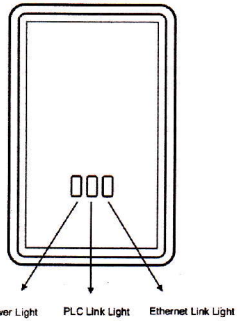
Note: HomePlug AV Ethernet Bridge needs to pair with at least one other HomePlug AV compatible device such as this one in order to create a working system.



1.3 Casing Details

Front Casing
The front casing contains 3 status lights: Power, PLC Link, and Ethernet Link

(INSERT FINAL CASING DESIGN)



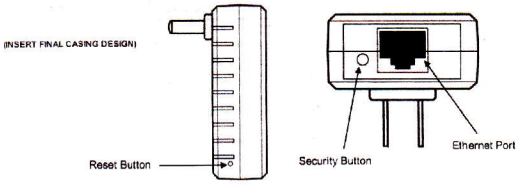
Status Lights

Power
On: This HomePlug Ethernet Bridge is receiving electrical power
Off: Power off

PLC Link
The PLC (Powerline) Link light will indicate the overall speed of your network with 3 colors:
Red: Minimum connection indicates weak signal and slower network speed: less than 50Mbps
Orange: Normal signal with standard network speed:50-100Mbps
Green: Excellent signal with optimal network speed: 100Mbps+
Off: No activity. This HomePlug Ethernet Bridge is not connected

Ethernet Link
Solid Green: 10/100Mbps port linked
Blinking: 10/100Mbps port transmitting or receiving
Off: Ethernet Link not active

Bottom Casing
The bottom casing contains a recessed Reset Button, a Security Button, and an Ethernet port.



Buttons

Security
This button is designed to generate an individual HomePlug AV network group under multiple nodes environment. Please refer to the optional Individual HomePlug AV Network Setup section below for more details.

Reset
This button is used to clear ALL data and restore ALL settings to the factory default values.

Note: The HomePlug AV Ethernet Bridge must be plugged in to restore it to factory defaults. Using a small object like a paper clip, depress and hold the Reset button until the status lights begin to flash. The Reset button will need to be depressed for about 10 to 15 seconds for the reset to occur.

1.1 Initial Setup

HomePlug is a plug and pay device: User is able to plug and play without any complex configuration and settings. You can use HomePlug AV mini Ethernet Bridge to connect networkable devices like computers and game consoles directly to each other. You can also connect devices like a computer or Blu-ray Disc ™ player to router or modem for internet access.

Connect the HomePlug AV Ethernet Bridge to a Computer or Modem/Router

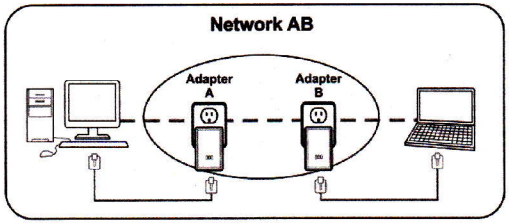
1. Plug one end of the Ethernet Cable into the Ethernet Port on the bottom of the HomePlug AV Ethernet Bridge.
2. Plug the HomePlug AV Ethernet Bridge into a AC Wall Power Outlet near the device you want to connect
   Warning: Do not plug this HomePlug AV Ethernet Bridge into a powerstrip that has surge protection. Doing so will degrade Powerline performance. For best performance, plug all HomePlug AV Ethernet Bridges directly into a wall outlet.
3. For connecting to a computer: Plug the other end of the Ethernet Cable into an OPEN Ethernet Port located on your computer
4. For connecting to a Modem or Router for Internet access: Plug the other end of the Ethernet Cable into an OPEN Ethernet Port on your Modem or Router.
5. Make sure the PLC Link light on each HomePlug AV Ethernet Bridge turns solid green.
6. Your HomePlug AV Ethernet Bridges are now connected forming a HomePlug AV network.

2 Individual HomePlug AV Network Setup (Optional)

All HomePlug AV Ethernet Brides ship with a default security key so they will automatically link to all other HomePlug AV Ethernet Bridges sharing the same electrical lines. If there are other HomePlug AV Ethernet Bridges in the building (such as an office or apartment building), you may want to create your own individual HomePlug AV network group so other HomePlug AV Ethernet Bridges cannot connect to your network.
This section describes how to use the Security button for configuration in the following situations

2.1 Creating a new individual HomePlug AV network (Network AB)

Two unassociated Bridges (Bridge A and Bridge B) are forming a new network—Network AB

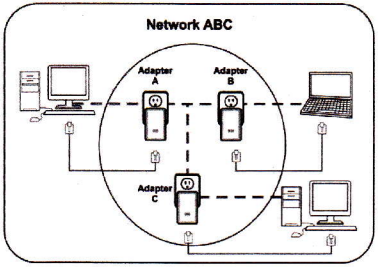


The procedure is as follows:

1. Press and hold the Security button on Bridge A for 10 seconds. Release it when the Power light flashes. The password to Bridge A has just been erased. It must now be linked to your network to adopt the new network security key.
2. Press and hold the Security button on Bridge B for 10 seconds. Release it when the Power light flashes. The password to Bridge B has just been erased. It must now be linked to your network to adopt the new network security key.
3. Currently, Bridge A and Bridge B are not networked
4. Press and hold the Security button on Bridge A for 2 seconds then release.
5. The Power lights on Bridge A starts to flash.
6. Within 120 seconds after the Power light on Bridge A starts to flash, press and hold the Security button on Bridge B for 2 seconds then release.
7. Both Bridge A and Bridge B are now networked together.

2.2 Adding Bridge C to existing Network AB (Network ABC)

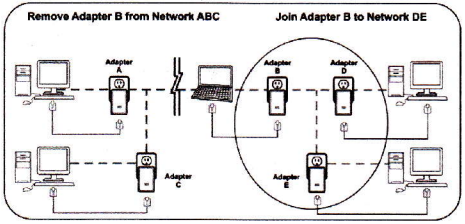
One unassociated Bridge C is added to an existing Network AB.



The procedure is as follows:

1. Press and hold the Security button on Bridge C for 10 seconds. Release it when the Power light flashed. The password to Bridge C has just been erased. It must now be linked to your network to adopt the new network security key.
2. Press and hold the security button on Bridge A for 2 seconds. The Power lights on Bridge A starts to flash.
3. Within 120 seconds after the Power light on Bridge A starts to flash, press and hold the security button on Bridge C for 2 seconds then release.
4. Bridge A, Bridge B and Bridge C are now networked to each other.

2.3 Removing Bridge B from Bridge A & C Network and join with Bridge D & E (Network BDE)



The procedure is as follows:

1. Press and hold the Security button on Bridge B for 10 seconds. Release it when the Power light flashes. The password to Bridge B has just been erased and removes itself from Bridge A & C.
2. Press and hold the Security button on Bridge D for 2 seconds.
3. Within 120 seconds after the Power light on Bridge D starts to flash, press and hold the Security button on Bridge B for 2 seconds then release.
4. Bridge B and Bridge D are now connected to each other, which in turn becomes part of Network BDE.

3 Troubleshooting

If your HomePlug AV Ethernet Bridges have difficulty communicating with each other, check the following:

- Try power cycling the unit by unplugging it from the wall for 10 seconds and plugging it in again.
- Use a pin and hold the Reset button down for 2 seconds on each unit you are trying to connect, The HomePlug AV Ethernet Bridge's light will flash, the units will reset and attempt to link using default factory settings.
- Try plugging the HomePlug AV Ethernet Bridge into an adjacent plug.
- HomePlug AV Ethernet Bridge work better when plugged directly into the wall outlet. Connecting these Ethernet Bridges to a power strip or surge protector may degrade network performance or completely stop network signals.
- This HomePlug AV Ethernet Bridge should not be used on GFI protected outlets as some outlets will filter out HomePlug Powerline signal.
- This HomePlug AV Ethernet Bridge should not be used in areas with excessive heat.
- Certain florescent or incandescent lights are noise sources on the electrical and can degrade performance.
- If your building has more than one circuit breaker box, your HomePlug AV Ethernet Bridges may not be able to connect between the different circuit breaker boxes. Connect Ethernet cable between each of the HomePlug AV Ethernet Bridges to link the different circuits together. This will allow the HomePlug AV Ethernet Bridges from different circuit breaker boxes to connect.

电力以太网适配器

123456789001

使用说明书

安全

FCC

本产品经检验测试符合FCC Part 15 Class B 标准，根据以下两个条件定义：
(1) 此产品不会造成有害干扰
(2) 此产品必须能够接受任何收到的干扰，包括可能会导致不能正常工作的干扰。

CE
本产品符合以下标准：CE Mark, 89/336/EEC

RoHS
本产品符合RoHS 标准.

目 录

1 电力以太网适配器.....12

1.1产品简介.....12
1.2系统原理图.....12
1.3产品外观.....13
产品正面.....13
指示灯.....13
产品背面.....14
按钮.....14
1.4初始化安装.....14
连接电力以太网适配器到电脑或者其它网络设备.....14

2 电力以太网适配器组网步骤(可选) 15

2.1 创建新的电力以太网适配器网络(网络AB) 15
2.2 增加桥接C到现有的网络(网络ABC) 16
2.3 从桥接A&C移出桥接B并加入桥接D & E(网络BDE) 16

3 常见问题解答.....17

1 电力以太网适配器

感谢您购买EDUP电力以太网适配器EP-PLC5506.

为了您能尽快轻松自如的使用该产品，在开始使用产品前，请仔细阅读此说明书，以便您能更好的使用该产品.

我们尽可能为您提供完善可靠的信息，但难免有疏漏之处，请您给予谅解并欢迎您的指正. 如果您在使用该产品过程中遇到问题，请及时拨打我们的服务热线，感谢您的支持和合作.

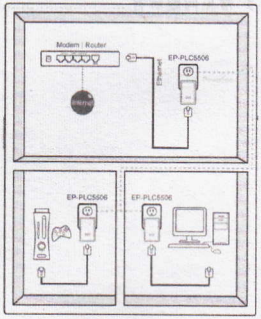
本说明书中的信息如有变更，恕不另行通知。请您及时与我司客服人员联系以便获取最新资料，或者浏览我司网站：Http://www.edup.cn

1.1 产品简介

此产品无需复杂的安装，无需额外的架线. 您只要将您的EP-PLC5506插到电源插座，再利用以太网线连接到您的计算机或其它网络设备即可完成布署. 在短短几分钟内，您就可以架设一个以电力线传输的网络. 即插即用，无需铺设信号电缆，减少建设投资；无需设置，使用简单；速度更快，传输速率可高达200Mbps，内置QoS让您的高清视频设备和高级游戏设备性能得到最大的发挥. 无辐射，低功耗，绿色节能.

1.2 使用原理图

使用此电力以太网适配器，可在您的家中任何一个房间架设一个网络. 您可以快速浏览高清影音，高速玩在线多人游戏或者更多其它密集型活动.

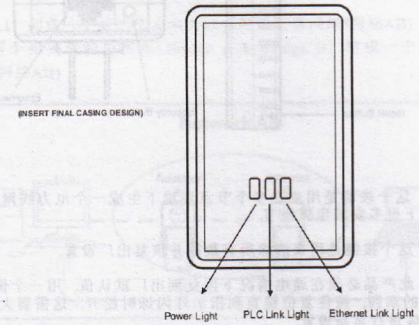


注意：电力以太网适配器至少需要2个(一对)才能架设一个以电力线传输的网络.

1.3 产品外观

产品正面

指示灯：Ethernet Link (ETH), PLC Link (PL), Power (PWR)



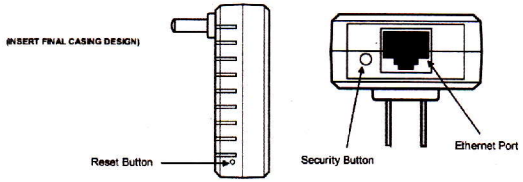
Power指示灯
On: 系统正在运行
Off: 系统没有上电

PCL Link指示灯
PL指示灯会根据网络连接速度显示三种不同的颜色：
红色：网络连接信号弱，速度慢，传输速度低于50Mbps
橙色：网络连接正常，传输速度50Mbps-100Mbps
绿色：网络连接非常好，传输速度高于100Mbps
不亮：电力以太网适配器没有连接

Ethernet Link指示灯
常亮：已经和网络终端设备连接
闪烁：正在和网络终端设备进行数据传输
不亮：没有和网络终端设备连接

产品背面和侧面

产品背面和侧面包括一个复位键，一个加密按钮和一个以太网接口.



按 键

加密：这个按键是用来在多个节点环境下生成一个电力线网络组，请参阅以下更多安装步骤细节.

复位：这个按键是用来清除所有数据并恢复出厂设置.

注意：此产品必须在通电情况下恢复到出厂默认值. 用一个像夹子之类小小的东西，按住复位键直到指示灯闪烁时松开，这需要大概10-15秒的时候进行重新设置.

1.4 初始化安装

EP-PLC5506电力以太网适配器是一个即插即用设备，用户无需做任何复杂的配置和设置，插上即可使用. 您可以使用此产品连接到任何网络设备，如电脑，游戏机等.

连接EP-PLC5506电力以太网适配器到电脑或者Modem/路由器

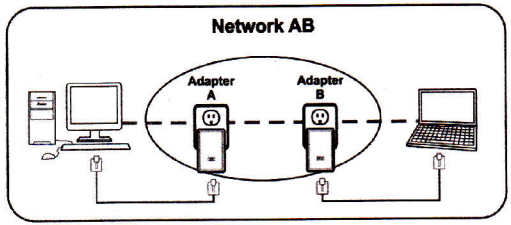
1. 将网线一端接入到电力以太网适配器的RJ45口.
2. 将电力以太网适配器插在您想要连接设备的附近插座上
   警告：不要将电力以太网适配器插在有电涌保护的插排上，这样会降低电力线的性能.为了获得最佳性能，请将电力以太网适配器直接插在墙上插座.
3. 电力以太网适配器连接电脑：将网线一端接到电脑上,另一端插入电力以太网适配器的RJ45口.
4. 电力以太网适配器连接到Modem/路由器：将网线的一端连接到Modem/路由器上任何一个RJ45口上.
5. 确保所有电力以太网适配器的PLC Link指示灯是绿色常亮.
6. 电力以太网适配器安装完成，可以连接网络.

2 个人电力以太网适配器组网步骤(可选)

所有的电力以太网适配器都有一个默认的安全密钥，在同一电力线内他们能自动和其它电力以太网适配器连接. 如果在一栋建筑里还有其它电力以太网适配器(如一个办公室或者公寓)，您可能想创建您个人的电力线网络，这样其它的电力以太网适配器不能连接到您的网络.

1.1 创建一个新的个人电力以太网适配器网络(网络AB)

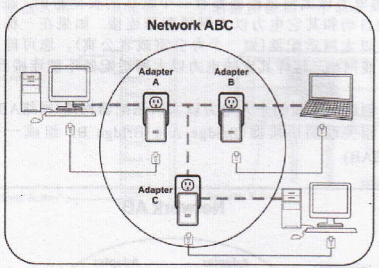
两个相关联的桥接器(Bridge A & Bridge B) 组成一个新的网络(网络AB)



安装步骤如下:

1. 按住 Bridge A的加密按钮保持大概10秒钟左右，直到电源灯闪烁时松开. 这时Bridge A的密码就清除了，如需加入到其它网络就需重新加密.
2. 按住Bridge B的加密按钮保持大概10秒钟左右，直到电源灯闪烁时松开. 这时Bridge B的密码就清除了，如需加入到其它网络就需重新加密.
3. 目前，Bridge A 和Bridge B还没连接网络.
4. 按住Bridge A加密按钮2秒钟左右然后松开.
5. Bridge A电源灯开始闪烁.
6. Bridge A电源闪烁120秒内，按住Bridge C加密按钮2秒钟左右然后松开
7. 此时Bridge A, Bridge B可以相互访问连接了。

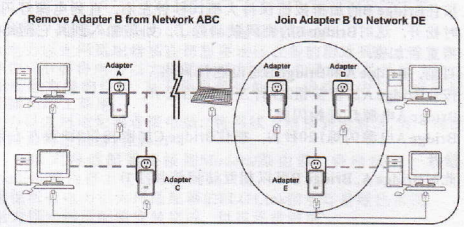
2.2 将Bridge C加入现有的AB网络(网络ABC)



设置步骤如下:

1. 按住 Bridge C的加密按钮保持大概10秒钟左右，直到电源灯闪烁时松开. 这时Bridge C的密码就清除了，如需加入到其它网络就需重新加密.
2. 按住Bridge A的加密按钮大概2秒钟左右，直到电源灯闪烁时松开.
3. Bridge A电源闪烁120秒内，按住Bridge C加密按钮2秒钟左右然后松开.
4. 此时Bridge A, Bridge B, Bridge C可以相互访问连接了。

2.3 将Bridge B 从Bridge A & C网络中移除并加入到Bridge D&E网络中(BDE网络)



设置步骤如下:

1. 按住 Bridge B的加密按钮保持大概10秒钟左右，直到电源灯闪烁时松开. 这时Bridge B的密码就清除了并从Bridge A & C网络中移除了.
2. 按住Bridge D的加密按钮大概2秒钟左右，直到电源灯闪烁时松开.
3. Bridge D电源闪烁120秒内，按住Bridge E加密按钮2秒钟左右然后松开.
4. 此时Bridge B, Bridge D, Bridge E组成了网络并可以相互访问连接了.

3 常见问题解答

如果您在使用EP-PLC5506产品时遇到任何问题，请按照以下检测您的网络:

1. 电源指示灯不亮
   (1) 请检查电力以太网适配器是否已牢固插入电源插孔
   (2) 请检查电源插孔是否故障，或者更换其他正常工作的插孔
   (3) 若上述操作后电源指示灯仍然不亮，其他指未灯显示正常，请咨询EDUP客服人员

2. 局域网状态指示灯不亮
   (1) 请检查电力以太网适配器的网口是否已经连接到计算机的网口或网络接入口.
   (2) 请确认计逢机网卡是否能正常使用，驱动程序以及配置参数是否正常
   (3) 请确认是否可以正常接入网络，将计算机直接连接到路由器的LAN口是否可以正常上网
   (4) 将电力以太网适配器连接到路由器其他的LAN口
   (5) 若上述操作后电源指示灯仍然不亮，其他指未灯显示正常，请咨询EDUP客服人员

3. 电力以太网适配器指示灯不亮
   (1) 将两个电力以太网适配器插在同一个插座中检查电力线设备指示灯是否点亮
   (2) 若上述操作后电源指示灯仍然不亮，其他指未灯显示正常，请咨询EDUP客服人员

4. 电力以太网适配器传输距离是多大?
   EP-PLC5506在同一电表范围内最远传输距离可达300米.

5. 邻居可以偷接使用我的网络吗?

不可以，电网入户一般都有电表,电表对电力以太网适配器的信号有阻断作用.如果没有电表,

6. 使用电力以太网适配器在电力线上传输数据，会受到家用电器的干扰吗?

家电设备使用对电力以太网适配器性能基本上无影响，但是插板,充电器可能对电力以太网适配器使用影响较大.在使用时,尽量将电力以太网适配器设备插在墙插上,且近距离尽量避免使用充电器,电源适配器等设备.

7. 用电力以太网适配器还需要传统的Modem吗?

需要，电力以太网适配器只是在家庭内部构建局域网使用,如果需要接入互联网还是需要通过小区宽带或传统的ADSL Modem等方式.

8. 电力以太网适配器单个可以使用吗?

不可以,至少需要两个才能使用. 1个连接ADSL Modem或路由器LAN口，1个连接电脑. 如果有两台电脑,则需要3个，三台电脑,刚需要4个,依此类推.